

Western Blot-Gel electrophoresis

Reagents:

NuPage LDS sample Buffer (4x): Invitrogen cat#46-5030 NP0007

NuPAGE 10%Bis-Tris Gel 1.0mmx10 well: Invotrogen, #NP0301

NuPage MOPS SDS Running Buffer: Invitrogen cat#46-5025 NP0001

Nitrocellulose: Protran BA85 Schleicher&Schuell cat#10402525N

Procedure:

Add sample buffer and samples to each tube, and then heat at 70°C for 10 minutes.

1. Electrophoresis

Set up gel box when waiting for sample to be heated up.

2. Blotting

Transfer buffer: 3.5L

Tricine	14.3 g
Bis Tris	18.3 g
Na₂EDTA	1g
Add Ultrapure Water to 3 L	
Methanol	70 ml
Ultrapure Water	to 4 L
pH 7.2	

Keep at 4°C.

a. Construct: Back (-pole): black plastic, sponge pad, filter paper, gel, nitrocellulose

membrane, filter paper, sponge pad, and lucent plastic :(+pole) Front

b. Two transfers: First: 30minutes at 100 volts
Second: 15 minutes at 100 volts

c. Keep current under 20 mA

d. Take membrane out, put it into TBS, and store at 4°C

3. Gel

a. Take out gel after second transfer, put into GELCODE Blue Stain (Comassie blue, PIERCE cat# 24590).

b. Stain the gels for 1 hour with gentle shaking, and then wash 3 times with distilled water. Dry the gels.